

ABSTRACT

AIM

To analyse the incidence, mode of injury, various clinical presentations, surgical technique and its functional outcome in patients with eyelid injuries.

MATERIALS AND METHODS

30 patients with traumatic eyelid injury presenting to Orbit and Oculoplasty services of Regional Institute of Ophthalmology and Government Ophthalmic Hospital were included in the study. They were registered, evaluated and followed up during the study period. Patients presenting with poor general condition requiring life support or with globe injury or orbital fractures were included in our study. All were subjected to detailed anterior segment evaluation to see the extent of the injury. Best corrected visual acuity (BCVA), extra ocular movements were assessed during presentation and schirmer's test in follow-up period. Radiological imaging will be analysed. Patients will be managed according to their presentation by either conservative treatment or surgical intervention

RESULTS

In our study, about 63.3% patients were below the age of 40 years. Mean age was 35 years. The incidence of lid injuries were more in males (63%) compared to females (37%). Laterality of eye involvement is almost same in both the eyes right eye (53%) and left eye (47%). The most common Mode of injury of the eyelid was accidental fall (36.7%) and assault (23.3%). People coming from rural areas were more common (63%) as compared to urban areas (37%). Right lower lid was found to be most commonly involved (26.7%) followed by left upper lid (23.3%) Visual acuity at the time of presentation was good for most of the patients 6/6-6/18 in (66%), 6/24-6/60 in 9 cases (23.7%). Thickness of the eyelid involved in injury also varied, full thickness involvement was seen in 20 patients (66.7%) while only 10 patients(33.3%) had partial thickness involvement. Involvement of the eyelid margin was seen in 18 patients (60%) and rest 12 were away from margin. Canalicular tear was associated with injury in 8 cases (26.7%) of which 7 were inferior canaliculus. Levator involvement was seen in 8 cases (26.7%) cases. Infection was present in the wound in 2 cases (6.7%) both of whom presented late to casualty. Tissue loss as observed in 3 cases (10%) in the study group however no graft was needed for the management of these cases. Mode of management as according to the presentation all partial thickness wound not involving margin was managed with primary suturing (50%) margin involved cases managed by three

layer margin suturing (26.7%) with monocanalicular stent placement in canalicular involvement cases (16.7%). Post surgery epiphora was the most common complaint by 12 patients (40%). Munk score for epiphora was evaluated, 6 patients had grade II while 4 had grade III epiphora. Only 10 patients among the 12 cases who complained of watering had schirmer's value more than 16mm. 12 patients (40%) were not satisfied with the cosmetic result. Post operative visual acuity was almost similar to pre operative visual acuity in all cases.

CONCLUSION :

This study reveals that young adult males, most of whom were workers from rural areas were more prone to eyelid injuries as usually men are more commonly engaged in higher risk jobs, operating vehicles and are also involved in higher rate of assaults or violent crimes. Time of presentation plays an important role in the outcome of the eyelid injury repair, earlier the presentation lesser was the rate of complications like infection, epiphora and cosmetic dissatisfaction. Lower canaliculus involvement was more than the upper canaliculus because of the more prone position of the inferior canaliculus to the injury as well as loose approximation of the lower lid to the globe medially. Epiphora was the most common complication seen post operatively which was seen in injuries involving the eyelid margin and canalicular injuries. Margin involving injuries lead to

notching of margin or ectropion post operatively. Early stent extrusion leading to stenosis of canaliculi also resulted in epiphora in these patients. Timely meticulous management of the eyelid injury with minimal debridement of the wound and tension free suturing makes the wound more aesthetically appealing. It also helps in restoring its anatomy and functionality to its previous state as accurately as possible.